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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,696	10/27/2006	Guido Cappellotto	C&P-146US	6770
23122	7590	07/31/2009		
RATNERPRESTIA P.O. BOX 980 VALLEY FORGE, PA 19482			EXAMINER BELLINGER, JASON R	
			ART UNIT 3617	PAPER NUMBER
			MAIL DATE 07/31/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/538,696

**Applicant(s)**

CAPPELLOTTO ET AL.

**Examiner**

Jason R. Bellinger

**Art Unit**

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 12-14, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB008)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Italy and the European Patent Office on various dates. It is noted, however, that applicant has not filed a certified copy of any of the foreign applications as required by 35 U.S.C. 119(b).

***Claim Objections***

2. Claim 15 is objected to because of the following informalities: In line 10, the phrase "the a" should be replaced with either the term --the-- or the term --a-- for grammatical clarity. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 and 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite due to the fact that the phrase "a first end" set forth in line 5 is a double recitation. This limitation has been previously set forth in the claim. Therefore, it is unclear whether the "first end" set forth in line 5 is the same as that previously set forth, or is an additional element of the invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 5, 10, 12, 15, and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Imao et al. Figure 5 of Imao et al shows a spoke having all of the limitations as set forth in the above claims. The double end threaded terminal element 7 is formed from steel, while the shaft 4 is formed from a fiber reinforced material. This material would have a mechanical strength less than that of the steel.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 4, 13-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imao et al. Imao et al does not disclose that the internally threaded portion (namely the internal threads of spoke ends 5) of the shaft 4 is formed as the external thread of the terminal element 7 is coupled to the hole in the spoke ends 5. First, it should be noted that this limitation is a method limitation (i.e. a self-tapping method step) set forth in an apparatus claims, and therefore receives no patentable

weight (See MPEP 2113). Second, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute self-tapping threaded elements for the terminal elements of Imao et al, as equivalent substitute fasteners, dependent upon the desired connection between the terminal elements and the spoke ends, and manufacturing costs.

Imao does not show the shaft 4 being made of a light alloy. However, Imao et al does disclose that the fiber reinforced material forming the spoke shaft 4 could be formed with an aluminum or titanium binding agent (column 3, lines 7-9). Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention that the spoke shaft of Imao et al could be formed from a light alloy, dependent upon the desired characteristics (i.e. weight, strength, etc.) of the spoke in addition to availability and cost.

Imao et al shows the internal threaded hole of the spoke end 5 being blind (once the shaft 4 is adhered 4a thereto). Imao et al does not disclose the length of the chamber in the spoke end 5 such that the entire threaded bore is not in contact with the threaded end of the terminal element 7. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the threaded bore of the terminal element of Imao et al with such a length that the threaded end of the terminal element 7 does not completely engage the entirety of the threaded bore in order to allow adjustment of the tension of the spoke.

Imao et al also does not show the shaft having a constant external diameter from the first end to the second end. However, it would have been obvious to one of ordinary

skill in the art at the time of the invention to provide the spoke shaft of Imao et al with a constant exterior diameter, for the purpose of reducing the number of manufacturing steps performed on the spoke shaft, thus reducing manufacturing costs and time.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-5, 10, 12-15, and 20-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Bellinger/  
Primary Examiner  
Art Unit 3617